CLAIMS

We claim:

1. A method comprising administering to an individual regulating body weight an amount of calcium-containing products sufficient to induce weight loss, prevent weight gain, and/or increase the metabolic consumption of adipose tissue in the individual.

2. The method of claim 1, wherein dietary calcium is administered daily in an amount of at least about 1000 mg/day.

3. The method of claim 1, comprising informing the individual that consumption of the calcium-containing product can induce weight loss or reduce weight gain.

4. The method of claim 1, further comprising determining dietary calcium consumption of the individual and (1) if the dietary calcium consumption is below 1000 mg/day, increasing the dietary calcium consumption, and (2) if the dietary calcium consumption is at least about 1000 mg/day, maintaining the dietary calcium consumption.

5. The method of claim 4, wherein the amount of dietary calcium consumed by the individual before administering the sufficient amount of calcium-containing products is less than about 400 mg/day.

6. The method of claim 4, wherein the amount of dietary calcium consumed by the individual before administering the sufficient amount of calcium-containing products is less than about 773 mg/day.

7. The method of claim 1, wherein the daily calcium administered is at least about 1346 mg/day.

8. The method of claim 1, wherein the individual is on a calorie restricted diet.

9. The method of claim 1, wherein the calcium is contained in dairy products.

10. A method of regulating weight in an individual comprising administering dairy products in an amount sufficient to induce weight loss, prevent weight gain, and/or increase the metabolic consumption of adipose tissue in the individual, the amount being at least about 57 servings per month.

11. The method of claim 10, wherein the dairy products are consumed daily.

12. The method of claim 10, further comprising determining the dairy consumption of the individual and (1) if the dairy consumption is below about 57 servings/month, increasing the dairy consumption, and (2) if the dairy consumption is at least about 57 servings/month, maintaining the dairy consumption.

13. The method of claim 10, wherein the amount of dairy consumed by the individual prior to administering the sufficient amount is less than about 57 servings/month.

14. The method of claim 10, wherein the calcium consumption induces a metabolic change selected from the group consisting of decreasing intracellular calcium concentrations ($[Ca^{2+}]_i$), stimulating lipolysis, inhibiting lipogenesis, increasing the expression of white adipose tissue uncoupling protein 2 (UCP2), reducing serum insulin levels, thermogenesis, and decreasing the levels of calcitrophic hormones.

15. The method of claim 1, wherein the calcium is contained in milk, yogurt, and/or cheese.

16. The method of claim 1, wherein the calcium is contained in a dietary supplement, foodstuffs supplemented with calcium, or other foods high in calcium.

17. The method of claim 1, wherein the calcium is contained in a liquid supplemented with calcium.

18. The method of claim 1, comprising the administration of effective amounts of dairy products, wherein the individual is a child, and the method reduces the risk of adiposity and/or controls weight gain products.

19. A method of modulating metabolism in an individual who consumes suboptimal amounts of dietary calcium comprising administering increased amounts of dietary calcium sufficient to induce a metabolic change in the individual.

20. The method of claim 19, wherein the metabolic change occurs within adipocytes.

21. The method of claim 19, wherein the metabolic change comprises decreasing intracellular calcium concentrations ($[Ca^{2+}]_i$), stimulating lipolysis, inhibiting lipogenesis, and increasing the expression of white adipose tissue uncoupling protein 2 (UCP2).

22. The method of claim 19 wherein the metabolic change comprises reducing serum insulin levels, thermogenesis, and decreasing the levels of calcitrophic hormones.